CLAIMS :

1.   A method of processing digital coded video data available in the form of a video
stream consisting of consecutive frames divided into macroblocks, said frames including at
least I-frames, independently coded, P-frames, temporally disposed between said I-frames
5   and predicted from at least a previous I- or P-frame, and B-frames, temporally disposed
between an I-frame and a P-frame, or between two P-frames, and bidirectionally predicted
from at least these two frames between which they are disposed, said predictions of P- and B-
frames being performed by means of a weighted prediction with unequal amount of
prediction from the past and the future, said processing method comprising the steps of :
10   -   determining for each successive macroblock of the current frame related coding
parameters characterizing, if any, said weighted prediction ;
                -   collecting said parameters for all the successive macroblocks of the current frame,
for delivering statistics related to said parameters ;
                -   analyzing said statistics for determining a change of preference for the direction of
15   prediction ;
                -   detecting the occurrence of a gradual scene change in the sequence of frames each
time a change of preference has been determined.

2.   A processing method according to claim 1, in which the analysis step is provided for
comparing the number of macroblocks having the same directional preference and similar
20   weighting against a predefined threshold derived in relation to the total number of
macroblocks in the current frame.

3.   A processing method according to claim 2, in which an information about the location
and the duration of each scene change is produced and stored in a file.

4.   A processing method according to anyone of claims 1 to 3, in which the syntax and
25   semantics of the processed video stream are those of the H.264/AVC standard.

5.   A device for processing digital coded video data available in the form of a video
stream consisting of consecutive frames divided into macroblocks, said frames including at
least I-frames, independently coded, P-frames, temporally disposed between said I-frames
and predicted from at least a previous I- or P-frame, and B-frames, temporally disposed
30   between an I-frame and a P-frame, or between two P-frames, and bidirectionally predicted
from at least these two frames between which they are disposed, said predictions of P- and B-
frames being performed by means of a weighted prediction with unequal amount of
prediction from the past and the future, said device comprising the following means :

- determining means, provided for determining for each successive macroblock of the current frame related coding parameters characterizing, if any, said weighted prediction ;

- collecting means, provided for collecting said parameters for all the successive macroblocks of the current frame, for delivering statistics related to said parameters ;

5   - analyzing means, provided for analyzing said statistics for determining a change of preference for the direction of prediction ;

- detecting means, provided for detecting the occurrence of a gradual scene change in the sequence of frames each time a change of preference has been determined.

6.   A computer program product for a digital video data decoding device, comprising a

10   set of instructions which, when loaded into said decoding device, causes said decoding device to carry out the steps of the processing method according to anyone of claims 1 to 4.